

Appln No. 10/660,815
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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously presented) A flexible container comprising:
a flexible front sheet and a flexible rear sheet attached to one another along at least one edge,
a container port comprising a nozzle, which has an internal diameter, integrally molded to an attachment flange, which is disposed between the flexible front sheet and flexible rear sheet; wherein the attachment flange comprises two ends and
a first attachment flange layer comprising an interior surface and an exterior surface and a second attachment flange layer comprising an interior surface and an exterior surface attached to one another along at least one edge, which is located at one of the two ends,
a center section located between the two ends; and
wherein the two interior surfaces are spaced apart from one another at the center section and converge at the two ends, and wherein a distance measured between the two ends at a point spaced apart from the container port is larger than the internal diameter of the nozzle.
2. (Previously presented) The flexible container of claim 1, wherein the first and second attachment flange layers are connected along a second edge.
3. (Previously presented) The flexible container of claim 2, wherein the two edges are creases formed from integrally molding the first and second flange layers.
4. (Previously presented) The flexible container of claim 1, wherein the attachment flange comprises a first opening adjacent the nozzle and a second larger opening away from the nozzle.

5. (Previously presented) The flexible container of claim 1, wherein the at least one edge of the attachment flange comprises a fin.

6. (Previously presented) The flexible container of claim 5, wherein the fin extends outwardly from the at least one edge.

7. (Previously presented) The flexible container of claim 6, wherein the fin tapers as it extends outwardly from the at least one edge.

8. (Previously presented) The flexible container of claim 1, wherein the flexible front and rear sheets each comprises a multi-layer film.

9. (Previously presented) The flexible container of claim 8, wherein the multi-layer film comprises three distinct film layers.

10. (Previously presented) The flexible container of claim 9, wherein a layer of the three distinct film layers is made from a blend of polypropylene-ethylene random copolymer and styrene ethylene-butylene styrene (SEBS) thermoplastic elastomer.

11. (Previously presented) The flexible container of claim 10, wherein a second layer of the three distinct film layers is made from either polyether block amide copolymer (PEBA) or an abuse resistant material containing ester groups (EGM).

12. (Previously presented) The flexible container of claim 11, wherein a third layer is made from SEBS if the second layer is made from EGM, and wherein the third layer is made from carboxy modified polypropylenes if the second layer made from PEBA.

13. (Previously presented) The flexible container of claim 1, wherein the container port is made from a blend of polypropylene-ethylene random copolymer and styrene ethylene-butylene styrene thermoplastic elastomer.

14. (Previously presented) The flexible container of claim 13, wherein the blend is in a weight-weight ratio of about 90:10 to about 70:30 of polypropylene-ethylene random copolymer to styrene ethylene-butylene styrene.

15. (Previously presented) The flexible container of claim 14, wherein the ratio is 80:20.

16. (Previously presented) The flexible container of claim 1, further comprising a second container port comprising a flexible attachment flange.

17. (Withdrawn) The flexible container of claim 1, further comprising a peelable seal for dividing the container into at least two compartments.

18. (Previously presented) The flexible container of claim 1, further comprising at least one drain seal for directing fluid stored inside the container to flow towards the container port.

19. (Previously presented) The flexible container of claim 1, wherein the container port comprises a flange.

20. (Previously presented) The flexible container of claim 19, further comprising a terminal port affixed to the flange of the container port.

21. (Previously presented) The flexible container of claim 20, wherein the terminal port comprises a puncture-able seal formed in an interior cavity of the terminal port.

22. (Previously presented) The flexible container of claim 20, further comprising a terminal cap affixed to the terminal port.

23. (Previously presented) The flexible container of claim 20, further comprising a foil innerseal affixed to the terminal port.

24. (Previously presented) The flexible container of claim 20, further comprising a rubber septum disposed in an interior cavity of the terminal port.

25. (Previously presented) The flexible container of claim 20, wherein the terminal port comprises a mating flange and wherein the mating flange is affixed to the flange of the container port.

26. (Withdrawn) The flexible container of claim 21, further comprising a rubber septum comprising a male plug disposed, at least in part, in an interior cavity of the terminal port and a pliable skirt folded over an exterior portion of the terminal port.

27. (Previously presented) The flexible container of claim 21, further comprising a rubber septum disposed, at least in part, in an interior cavity of the terminal port and a metallic shell crimped to an exterior surface of the terminal port.

28. (Withdrawn) The flexible container of claim 19, further comprising a seal sleeve disposed, at least in part, in an interior cavity of the container port, and wherein the seal sleeve comprises a puncture-able seal.

Appln No. 10/660,815

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29. (Withdrawn) The flexible container of claim 28, wherein the seal sleeve is adapted to receive a spike of an IV administration set.

30. (Previously presented) The flexible container of claim 21, wherein the terminal port is adapted to receive a spike of an IV administration set.

31. (Previously presented) The flexible container of claim 21, wherein the flexible attachment flange has a pyramid shape with a truncated top comprising a first end and a larger second end.

32. (Currently amended) The flexible container of claim 1, wherein ~~the~~a heat bar used to fuse the attachment flange to the flexible front and rear sheets is generally flat.

33. (Original) The flexible container of claim 32, wherein the generally flat heat bar is coated with vulcanized rubber.

34-45. (Cancelled)

46. (New) A flexible container for storing a flowable product comprising:
a flexible front sheet and a flexible rear sheet attached to one another along at least a portion of a common perimeter;

a container port comprising a nozzle integrally molded to a flexible attachment flange and the attachment flange attached to the flexible front and rear sheets, said nozzle comprising an internal diameter;

wherein the flexible attachment flange comprises a first flange layer comprising an interior surface and an exterior surface attached to a second flange layer comprising an interior surface and an exterior surface; the two flange layers defining an interior cavity

comprising a first opening and a larger second opening in fluid communication with the nozzle, said second opening being larger than the internal diameter of the nozzle; and

wherein at least a portion of the interior surface of the first flange layer is configured to contact at least a portion of the interior surface of the second flange layer when the flexible attachment flange is compressed between the flexible front sheet and the flexible rear sheet.

47. (New) The flexible container of claim 46, wherein the flexible attachment flange has a cross-section perpendicular to an axis of the container port at the larger second opening that has a large center section and tapers from large to small as it extends away from the large center section.

48. (New) The flexible container of claim 46, wherein the flexible attachment flange comprises two common edges each comprising a fin that tapers from large to small.

49. (New) The flexible container of claim 46, further comprising a terminal port attached to the container port.

50. (New) A flexible container for storing a flowable product comprising:
a flexible front sheet and a flexible rear sheet attached to one another along at least a portion of a common perimeter;

a first container port comprising a nozzle integrally molded to a first flexible attachment flange, which is attached to the flexible front sheet and flexible rear sheet;

a second container port comprising a nozzle integrally molded to a second flexible attachment flange, which is attached to the flexible front sheet and flexible rear sheet,

the first and the second flexible attachment flanges each comprising a flexible front flange sheet attached to a flexible rear flange sheet along two common edges and having a first opening and a second larger opening; and

Appln No. 10/660,815
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a web connected to one common edge of the first flexible attachment flange and to one common edge of the second flexible attachment flange and to the flexible front sheet and flexible rear sheet.

51. (New) The flexible container of claim 50, wherein the first container port and the second container port are each connected to a terminal port comprising a flange.

52. (New) The flexible container of claim 50, wherein the common edge of the first flexible attachment flange and the second flexible attachment flange not connected to the web each comprises a fin, which tapers from large to small as it extends in a direction away from the second larger opening.